

Listing of the Claims

1. (Previously Presented) A method comprising:
receiving input data comprising one or more integration object instances, wherein
an integration object comprises a schema of a set of data, wherein
the schema comprises a plurality of integration object components,
the plurality of integration object components are hierarchically
related,
the plurality of integration object components comprises first and
second integration object components, and
the second integration object component is a child component of
the first integration object component, and
an integration object instance comprises data organized in a structure
defined by the integration object, wherein
the data is extracted from a first database,
the data comprises a first and second integration object instance
component each respectively corresponding to the first and
the second integration object component; and
modifying a database in response to the input data, the modifying comprising
comparing a first database record with the first integration object
component,
modifying the first database record using the information associated with
the first integration object instance component, if the first database
record matches information associated with the first integration
object component,
finding one or more child database records associated with the first
database record,
modifying one or more of the child database records using the information
associated with the second integration object instance component,
if the second integration object component comprises a record

matching a corresponding record in the one of the one or more child database records, and

inserting a new database record comprising the information associated with the second integration object instance component, if the second integration object component does not comprise a record matching a corresponding record in one of the one or more child database records, wherein the one or more child database records comprises the new database record.

2. (Previously Presented) The method of claim 1, wherein the database modification process further comprises:

deleting a record from the one or more child database records, if the record does not have a matching integration object component in the hierarchy.

3. (Previously Presented) The method of claim 1, wherein finding the first database record matching the first integration object component comprises:

extracting a userkey related to an object type of the first integration object component;

utilizing the userkey to find the first database record.

4. (Previously Presented) The method of claim 3 wherein: the finding comprises utilizing SQL queries directed to the database.

5. (Previously Presented) The method of claim 2 wherein: the deleting further comprises cascaded deleting.

6. (Previously Presented) A method comprising: receiving input data comprising one or more integration object instances, wherein an integration object comprises a schema of a set of data, wherein the schema comprises a plurality of integration object components,

the plurality of integration object components are hierarchically related,
the plurality of integration object components comprises first and second integration object components, and
the second integration object component is a child component of the first integration object component, and
an integration object instance comprises data organized in a structure defined by the integration object, wherein
the data is extracted from a first database,
the data comprises a first and second integration object instance component each respectively corresponding to the first and the second integration object component; and
modifying the plurality of integration object instances using a database, said modifying comprising
comparing a first database record with the first integration object component,
modifying the first integration object instance component using data from the first database record, if the first database record matches information associated with the first integration object component,
finding one or more child database records associated with the first database record,
modifying the second integration object instance component using data from one of the one or more child database records, if the second integration object component comprises a record matching a corresponding record in the one of the one or more child database records, and
inserting a new integration object component instance comprising data from one of the one or more child database records, if the one of the one or more child database records does not comprise a record matching a corresponding record in the second integration object component, wherein

the new integration object component instance is a child of the first integration object component instance.

7. Canceled.

8. (Previously Presented) The method of claim 6 wherein the finding the first database record matching the first integration object component comprises:

extracting a userkey related to an object type of the first integration object component; and
utilizing the userkey to find the first database record.

9-10. Canceled.

11. (Previously Presented) An apparatus comprising:

means for receiving input data comprising one or more integration object instances, wherein

an integration object comprises a schema of a set of data, wherein
the schema comprises a plurality of integration object components,
the plurality of integration object components are hierarchically
related,

the plurality of integration object components comprises first and
second integration object components, and

the second integration object component is a child component of
the first integration object component, and

an integration object instance comprises data organized in a structure
defined by the integration object, wherein

the data is extracted from a first database,

the data comprises a first and second integration object instance
component each respectively corresponding to the first and
the second integration object component; and

means for modifying the plurality of integration object instances using a database,
the means for modifying comprising

means for comparing a first database record with the first integration object component,

means for modifying the first integration object instance component using data from the first database record, if the first database record matches information associated with the first integration object component,

means for finding one or more child database records associated with the first database record,

means for modifying the second integration object instance component using data from one of the one or more child database records, if the second integration object component comprises a record matching a corresponding record in the one of the one or more child database records, and

means for inserting a new integration object component instance comprising data from one of the one or more child database records, if the one of the one or more child database records does not comprise a record matching a corresponding record in the second integration object component, wherein the new integration object component instance is a child of the first integration object component instance.

12. Canceled.

13. (Previously Presented) The apparatus of claim 11 wherein the means for finding the first database record matching the first integration object component comprises:

means for extracting a userkey related to an object type of the first integration object component; and

means for utilizing the userkey to find the first database record.

14-16. Canceled.

17. (Previously Presented) A machine-readable medium embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, the method comprising:

receiving input data comprising one or more integration object instances, wherein

an integration object comprises a schema of a set of data, wherein

the schema comprises a plurality of integration object components,

the plurality of integration object components are hierarchically related,

the plurality of integration object components comprises first and second integration object components, and

the second integration object component is a child component of the first integration object component, and

an integration object instance comprises data organized in a structure defined by the integration object, wherein

the data is extracted from a first database,

the data comprises a first and second integration object instance component each respectively corresponding to the first and the second integration object component; and

modifying a database in response to the input data, the modifying comprising

comparing a first database record with the first integration object component,

modifying the first database record using the information associated with the first integration object instance component if the first database record matches information associated with the first integration object component,

finding one or more child database records associated with the first database record,

modifying one or more of the child database records using the information associated with the second integration object instance component, if the second integration object component comprises a record matching a corresponding record in the one of the one or more child database records, and

inserting a new database record comprising the information associated with the second integration object instance component, if the second integration object component does not comprise a record matching a corresponding record in one of the one or more child database records, wherein the one or more child database records comprises the new database record.

18. (Previously Presented) The machine readable medium of claim 17, further embodying instructions, which, when executed by the processor, cause the processor to perform the method, wherein the database modification process further comprises:

deleting a record from the one or more child database records, if the record does not have a matching integration object component in the hierarchy.

19. (Previously Presented) The machine readable medium of claim 17, further embodying instructions, which, when executed by the processor, cause the processor to perform the method wherein finding the first database record matching the first integration object component comprises:

extracting a userkey related to an object type of the first integration object component;

utilizing the userkey to find the first database record.

20. (Previously Presented) The machine readable medium of claim 19, further embodying instructions, which, when executed by the processor, cause the processor to perform the method wherein:

the finding includes utilizing SQL queries directed to the database.

21. (Previously Presented) The machine readable medium of claim 20, further embodying instructions, which, when executed by the processor, cause the processor to perform the method wherein:

the deleting further includes cascaded deleting.

22. (Previously Presented) A system comprising:
a memory;
an interface, coupled to the memory, configured to receive input data comprising one or more integration object instances, wherein
an integration object comprises a schema of a set of data, wherein
the schema comprises a plurality of integration object components,
the plurality of integration object components are hierarchically related,
the plurality of integration object components comprises first and second integration object components, and
the second integration object component is a child component of the first integration object component, and
an integration object instance comprises data organized in a structure defined by the integration object, wherein
the data is extracted from a first database,
the data comprises a first and second integration object instance component each respectively corresponding to the first and the second integration object component; and
a processor, coupled to the interface, configured to modify a database in response to the input data, wherein to modify the database the processor is further configured to
compare a first database record matching with the first integration object component,
modify the first database record using the information associated with the first integration object instance component, if the first database record matches information associated with the first integration object component,
find one or more child database records associated with the first database record,
modify one or more of the child database records using the information associated with the second integration object instance component, if the second integration object component comprises a record

matching a corresponding record in the one of the one or more child database records, and
insert a new database record comprising the information associated with the second integration object instance component, if the second integration object component does not comprise a record matching a corresponding record in one of the one or more child database records, wherein
the one or more child database records comprises the new database record.

23. (Previously Presented) The system of claim 22 wherein to modify the database, the processor is further configured to
delete a record from the one or more child database records, if the record does not have a matching integration object component in the hierarchy.

24. (Previously Presented) The system of claim 22 wherein to find the first database record matching the first integration object component, the processor is further configured to
extract a userkey related to an object type of the first integration object component, and
utilize the userkey to find the first database record.

25. (Previously Presented) The system of claim 24 wherein to find the database records, the processor is further configured to:
utilize SQL queries directed to the database.

26. (Previously Presented) The system of claim 23 wherein to delete the record, the processor is further configured to:
cascade delete.

27-33. Canceled.